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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,883	07/10/2003	Francisco J. Romero	200207858-1	2634
	7590 06/11/200 CKARD COMPANY	EXAMINER		
Intellectual Property Administration			TO, JENNIFER N	
P. O. Box 272400 Fort Collins, CO 80527-2400			ART UNIT	PAPER NUMBER
,			2195	
			MAIL DATE	DELIVERY MODE
			06/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/616,883	ROMERO, FRANCISCO J.				
Office Action Summary	Examiner	Art Unit				
	JENNIFER N. TO	2195				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 11 A <sub>B</sub>	oril 2008.					
	action is non-final.					
3) Since this application is in condition for allowar						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-25 and 27-33</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-25 and 27-33</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct		•				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
oce the attached detailed effice action for a list	or the contined copies not receive	u.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	5)  Notice of Informal P 6)  Other:	atent Application				

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## **DETAILED ACTION**

1. In view of the appeal brief filed on 04/11/2008, PROSECUTION IS HEREBY REOPENED. The final office action mailed on 09/24/2007 has been withdrawn, a new ground of rejection is set forth below in view of Srinivasan (U.S. Publication No. 2004/0111725), Stone (U.S. Patent No. 6823382), and Voskuil (U.S. Publication No. 2002/0032768).

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.
- 2. Claims 1-25, and 27-33 are pending for examination.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 4. Claims 1-5, 10-23, and 27 are rejected under 35 U.S.C. 102(e) as being antcipated by Srinivasan et al. (hereafter Srinivasan) (U.S. Publication No. 2004/0111725).
- 5. Srinivasan was cited in IDS filed 12/13/2004.
- 6. As per claim 1, Srinivasan teaches the invention as claim including a system comprising:

a processor for executing instructions of a monitoring agent to monitor application data for compliance with policy data (abstract, lines 11-13; application scheduler; paragraphs [009], [0058]);

storage that is accessed due to the instructions executing on the processor, wherein the storage stores (paragraph [0058]):

resource data, the resource data including information on a plurality of resources, the resources including a plurality of computers (paragraphs [0024]-[0025]);

application data, the application data including one or more application profiles, each application profile having a performance profile and a resource profile, the resource profile including resource utilization information (abstract;

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paragraphs [009], [0021], [0033]-[0042], i.e. paragraph [0039], usage information is the application data include the performance profile of the application, and the resource usage information); and

policy data, the policy data including one or more application performance policies and one or more resource utilization policies (fig. 3; paragraphs [009], [0033]-[0037]).

- 7. As per claim 2, Srinivasan teaches that wherein at least one of the applications comprises an aggregate application executing on at least two of the computers (paragraph [0021]).
- 8. As per claim 3, Srinivasan teaches that wherein the monitoring agent is further to perform arbitration within a domain grouping one or more of the computers in response to a violation of one of the application and resource policies (paragraphs [0037], [0042], the application scheduler in response to the policy violations perform the modification actions...migrate the application instance to another server).
- 9. As per claim 4, Srinivasan teaches that wherein the monitoring agent is further to expand a domain grouping one or more of the computers in response to a policy violation (paragraphs [0025], [0038]).

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10. As per claim 5, Srinivasan teaches that wherein the monitoring agent is further to contract a domain grouping one or more of the computers (paragraph [0037]).

- 11. As per claim 10, Srinivasan teaches that wherein the resource profile further includes resource demand information on the amount of resources an application requires (paragraph [0024]).
- 12. As per claim 11, Srinivasan teaches that wherein the resource utilization information includes resource consumption information on the amount of resources an application is currently assigned (paragraphs [0029]-[0033]).
- 13. As per claim 12, Srinivasan teaches that wherein the resource utilization information includes at least one of resource consumption information on the amount of resources an application is currently using, and resource consumption information on the amount of resources an application has used over a period of time (paragraph [0039]).
- 14. As per claim 13, Srinivasan teaches that wherein one of the computers is associated with a container to execute one of the applications (paragraph [0037]).

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15. As per claim 14, Srinivasan teaches that wherein one of the computers is associated with a plurality of containers, each container to execute one of the applications (paragraph [0037]).

- 16. As per claim 15, Srinivasan teaches that wherein the policy data further includes one or more container utilization policies, each utilization policy associated with one of the containers (paragraph [0037]).
- 17. As per claim 16, Srinivasan teaches that wherein at least one of the containers is a partition (paragraph [0037]).
- 18. As per claim 17, Srinivasan teaches that wherein the monitoring agent is further to resize the partition in response to a violation of one of the policies (paragraph [0038]).
- 19. As per claim 18, Srinivasan teaches that wherein the partition is a hardware partition (paragraph [0037]).
- 20. As per claim 19, Srinivasan teaches that wherein the partition is a software-based partition (paragraphs [0037]).
- 21. As per claim 20, Srinivasan teaches that wherein at least one of the containers is a processor set (paragraph [0037]).

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22. As per claim 21, Srinivasan teaches that wherein at least one of the containers is a sub-CPU resource partition (paragraph [0037]).

- 23. As per claim 22, Srinivasan teaches that wherein the performance information includes response time (paragraph [0040]).
- 24. As per claim 23, Srinivasan teaches that wherein one or more of the application profiles includes resource allocation information for the associated application (paragraph [0021]).
- 25. As per claim 27, Srinivasan teaches that wherein the performance policies have a relative associated priority (paragraph [0033]).

## Claim Rejections - 35 USC § 103

- 26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 27. Claims 6-9, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan et al. (hereafter Srinivasan) (U.S. Publication No. 2004/0111725), and in view of Stone (U.S. Patent No. 6823382).

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28. Stone was cited in the previous office action.

- 29. As per claim 6, Srinivasan teaches the invention as claimed in claim 1. Srinivasan did not specifically teach domain definition data, the domain definition data including information on a plurality of domains, each domain comprising a grouping of one or more computers, one or more of the domains being a cluster.
- 30. However, Stone teaches domain definition data, the domain definition data including information on a plurality of domains, each domain comprising a grouping of one or more computers, one or more of the domains being a cluster (col. 7, lines 17-27).
- 31. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Srinivasan and Stone because both of Srinivasan and Stone teaching of monitoring performance of server computers and applications. In addition Stone teaching of domain definition data, the domain definition data including information on a plurality of domains, each domain comprising a grouping of one or more computers, one or more of the domains being a cluster would improved the integrity of Srinivasan's system by providing a system that capable of monitoring and controlling server computers and applications (Stone, col. 1, lines 9-10).

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32. As per claim 7, Stone teaches that wherein the cluster comprises a first container executing a set of replicated instances of an application on a first set of nodes and a second container having a second set of nodes (col. 7, lines 17-27).

- 33. As per claim 8, Stone teaches that wherein the monitoring agent is further to transfer a node from the second container to the first container in response to a violation of one of the policies (col. 9, lines 10-33).
- 34. As per claim 9, Stone teaches that domain definition data having information on a plurality of domains, each domain comprising a grouping of one or more computers, the domain definition data further including information on the resource utilization of a domain (col. 7, lines 17-36; col. 13, lines 34-45).
- 35. As per claim 28, Srinivasan teaches the invention substantially as claim including a method comprising:

monitoring application data for compliance with one or more performance policies, the application data including one or more application profiles, each application profile having a performance profile and a resource profile, the resource profile including resource utilization information associated with an application, each application executing in a container, the resources including a plurality of computers; in response to a policy violation, automatically enforcing the policy by expanding a first one of the containers (fig. 3; paragraphs [009], [0021]-[0042]).

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36. Srinivasan did not specifically teach that each application executing in a container associated with a domain, each domain including one or more resources.

- 37. However, Stone teaches that each application executing in a container associated with a domain, each domain including one or more resources (fig. 2; col. 7, lines 17-36; col. 13, lines 34-45, each tier comprise one or more server).
- 38. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Srinivasan and Stone because both of Srinivasan and Stone teaching of monitoring performance of server computers and applications. In addition, Stone teaching of each application executing in a container associated with a domain, each domain including one or more resources would improved the integrity of Srinivasan's system by providing an improved system that capable of monitoring and controlling server computers and applications (Stone, col. 1, lines 9-10).
- 39. As per claim 29, Srinivasan teaches that wherein the first container comprises a partition and expanding the first container comprises resizing the partition (paragraph [0038]).

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40. As per claim 30, Stone teaches that wherein the domain associated with the first container comprises a cluster (fig. 2).

- 41. As per claim 31, Stone teaches that wherein expanding the first container comprises transferring a node associated with a second container, the second container being in the domain associated with the first container, to the first container (col. 9, lines 10-33).
- 42. As per claim 32, Stone teaches that in response to a second policy violation, providing a message to a user (col. 5, lines 43-51; col. 8, lines 9-19).
- 43. As per claim 33, Stone teaches that wherein the message comprises a message that a lower priority policy cannot be met (col. 5, line 59-60; col. 14, line 64 through col. 1, line 16).
- 44. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan et al. (hereafter Srinivasan) (U.S. Publication No. 2004/0111725), as applied in claim 1 above, and in view of Voskuil (U.S. Publication No. 2002/0032768).
- 45. As per claims 24-25, Srinivasan teaches the invention substantially as claimed in claim 1 above. Srinivasan did not specifically teach that wherein one or more application profiles includes instructions for installing the associated application.

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46. However, Voskuil teaches that wherein one or more application profiles includes

instructions for installing the associated application and configuring the associated

application (paragraphs [0036]-[0038]).

47. It would have been obvious to one of an ordinary skill in the art at the time the

invention was made to have combine the teaching of Srinivasan and Voskuil because

Voskuil teaching of one or more application profiles includes instructions for installing

and configuring the associated application would improved Srinivasan's system by

providing information to make changes and to configure of the application (Voskuil,

paragraph [0005]).

Conclusion

48. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jennifer N. To whose telephone number is (571) 272-

7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

49. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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50. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/ Supervisory Patent Examiner, Art Unit 2195 Jennifer N. To Examiner Art Unit 2195